HALCÓN
RESOURCES

Environmental Protection Agency
Region 8 Office of Enforcement
Compliance and Environmental Justice
Air Toxics and Technical Enforcement Program
8ENF-AT
1595 Wynkoop Street
Denver, CO 80202-1129

October 30, 2017
Via email
r8airreportenforcement@epa.gov

RE: NSPS OOOOa Annual Report per 40 CFR §60.5420a for Affected Facilities Owned/Operated by HRC Operating, LLC During the Reporting Period 08/02/2016 – 08/02/2017

To Whom It May Concern:

Per the requirements of the referenced regulation, enclosed , please find two copies of the completed annual report for the affected facilities for the reporting period beginning August 2, 2016 and ending on August 2, 2017.

The report follows the EPA's Compliance and Emissions Data Reporting (CEDRI) format per requirements of §60.5420a(b) as provided by the EPA on October 6, 2017 and is consistent of the following data tables, enclosed herein as Attachment 1:

Table 1 – provides general company and affected facility site names. Certifications by a qualified professional engineer of a design of a closed vent system for an applicable facility are enclosed herein as Attachment 2.

Table 2 – provides information for each well facility that met the definition of an "affected source" per §60.5365a(a);

Table 3 – Halcon did not operate a centrifugal compressors meeting the definition of an "affected source" per 60.5365a(b) during the reporting period; therefore, this table is marked as "Not Applicable" (N/A);

Table 4 – Halcon did not operate a reciprocating compressor meeting the definition of an "affected source" per §60.5365a(c) during the reporting period; therefore, this table is marked as N/A;

Table 5 – Halcon did not operate a pneumatic controller meeting the definition of an "affected source" per §60.5365a(d) during the reporting period; therefore, this table is marked as N/A;

Table 6 – emissions of the storage vessels constructed or modified during the reporting period are subject to the practically and legally enforceable limitations set by the operating air permits with a potential to emit VOCs for each storage vessels of greater than 6 tons per year (tpy); therefore, these storage vessels are an affected source per §60.5365a(e); calculations demonstrating potential to emit for each affected tank battery are enclosed herein as Attachment 3.

Table 7 – provides information for each affected well facility subject to the fugitive emissions monitoring and repair program; and

Table 8 – Halcon did not operate a pneumatic pump meeting the definition of an "affected source" per §60.5365a(h) during the reporting period; therefore, this table is marked as N/A.

By signing below, I certify that based on information and belief formed after reasonable inquiry, the statements and information in the document and its attachments are true, accurate, and complete.

Should you require any additional information or have any questions, please do not hesitate to contact Ms. Oksana Wright, Environmental Manager, at 713-210-7528 or via email at owright@halconresources.com.

Sincerely,

Jon C. Wright
EVP & COO, HRC Operating, LLC

Enclosures

Copy: Facility Environmental Files
Bruin E&P Operating LLC

ATTACHMENT 1

CEDRI TABLES

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For each affected facility, an owner or operator must include the information specified in paragraphs (b)(1)(i) through (iv) of this section in all annual reports:

The asterisk (*) next to each field indicates that the corresponding field is required.

				SITE INFORMATION							ALTERNATIVE ADDRESS INFORI
	Facility Record No. * **(Field value will automatically generate if a value is not entered.)**	Company Name * (§60.5420a(b)(1)(i))	Facility Site Name * (§60.5420a(b)(1)(i))	US Well ID or US Well ID Associated with the Affected Facility, if applicable. * (§60.5420a(b)(1)(i))	Address of Affected Facility * (§60.5420a(b)(1)(i))	Address 2	City *	County *	State Abbreviation *	Zip Code *	Responsible Agency Facility ID (State Facility Identifier)	Description of Site Location (§60.5420a(b)(1)(i))
		e.g.: ABC Company	e.g.: XYZ Compressor Station	e.g.: 12-345-67890-12	e.g.: 123 Main Street	e.g.: Suite 100	e.g.: Brooklyn	e.g.: Kings County	e.g.: NY	e.g.: 11221		e.g.: 7 miles NE of the intersection of Hwy 123 and Hwy 456
1		HRC Operating, LLC	HANDIES	FB 148-94-22A-27-12H(L	N/A	N/A	Mandaree	Dunn	ND	58757		(b) (9)
2		HRC Operating, LLC	HANDIES	FB 148-94-22A-27-11H	N/A	N/A	Mandaree	Dunn	ND	58757		
3		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-7H	N/A	N/A	New Town	McKenzie	ND	58763		
4		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-5H	N/A	N/A	New Town	McKenzie	ND	58763		
5		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-6H	N/A	N/A	New Town	McKenzie	ND	58763		
6		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-14H	N/A	N/A	New Town	McKenzie	ND	58763		
7		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-11H	N/A	N/A	New Town	McKenzie	ND	58763		
8		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-8H	N/A	N/A	New Town	McKenzie	ND	58763		
9		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-9H	N/A	N/A	New Town	McKenzie	ND	58763		
10		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-10H	N/A	N/A	New Town	McKenzie	ND	58763		
11		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-12H(LL)	N/A	N/A	New Town	McKenzie	ND	58763		
12		HRC Operating, LLC	VERMEJO	FB 152-93-7C-6-13H(LL)	N/A	N/A	New Town	McKenzie	ND	58763		
13		HRC Operating, LLC	OKLAHOMA	FB 148-94-36D-25-10H(L	N/A	N/A	Mandaree	Dunn	ND	58757		
14		HRC Operating, LLC	OKLAHOMA	FB 148-94-36D-25-11H	N/A	N/A	Mandaree	Dunn	ND	58757		
15		HRC Operating, LLC	OKLAHOMA	FB 147-94-1A-12-12H(LL	N/A	N/A	Mandaree	Dunn	ND	58757		
16		HRC Operating, LLC	OKLAHOMA	FB 147-94-1A-12-11H(LL	N/A	N/A	Mandaree	Dunn	ND	58757		
17		HRC Operating, LLC	LA PLATA	FB 152-94-22D-15-10H(L	N/A	N/A	New Town	McKenzie	ND	58763		
18		HRC Operating, LLC	LA PLATA	FB 152-94-22D-15-11H(L	N/A	N/A	New Town	McKenzie	ND	58763		
19		HRC Operating, LLC	WINDOM	FB 148-94-36C-25-7H	N/A	N/A	Mandaree	Dunn	ND	58757		
20		HRC Operating, LLC	WINDOM	FB 148-94-36C-25-5H	N/A	N/A	Mandaree	Dunn	ND	58757		
21		HRC Operating, LLC	WINDOM	FB 148-94-36C-25-4H	N/A	N/A	Mandaree	Dunn	ND	58757		
22		HRC Operating, LLC	WINDOM	FB 148-94-36C-25-12H	N/A	N/A	Mandaree	Dunn	ND	58757		
23		HRC Operating, LLC	WINDOM	FB 148-94-36C-25-8H	N/A	N/A	Mandaree	Dunn	ND	58757		
24		HRC Operating, LLC	WINDOM	FB 148-94-36C-25-6H	N/A	N/A	Mandaree	Dunn	ND	58757		
25		HRC Operating, LLC	PYRAMID 2	FB 148-94-35D-26-11H(L	N/A	N/A	Mandaree	Dunn	ND	58757		
26		HRC Operating, LLC	PYRAMID 2	FB 148-94-35D-26-12H	N/A	N/A	Mandaree	Dunn	ND	58757		
27		HRC Operating, LLC	PYRAMID 2	FB 148-94-35D-26-13H	N/A	N/A	Mandaree	Dunn	ND	58757		
28		HRC Operating, LLC	SNEFFELS 3	FB 148-94-35C-26-9H	N/A	N/A	Mandaree	Dunn	ND	58757		
29		HRC Operating, LLC	Handies	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

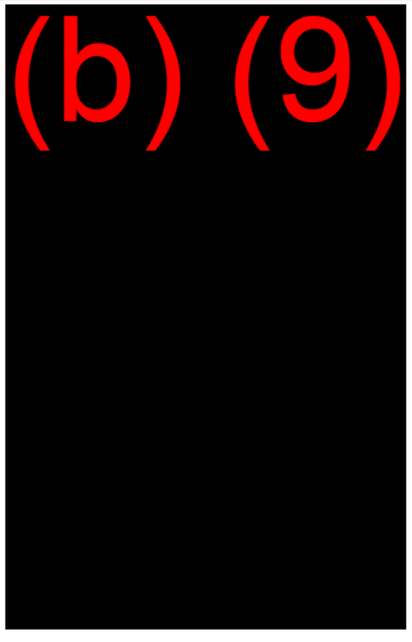
For each affected facility, an owner or operator must include the information specified in paragraphs (b)(1)(i) through (iv) of this section in all annual reports:

The asterisk (*) next to each field indicates that the corresponding field is required.

		SITE INFORMATION								ALTERNATIVE ADDRESS INFORM
	Facility Record No. * (Field value will automatically generate if a value is not entered.)	Company Name * (§60.5420a(b)(1)(i))	Facility Site Name * (§60.5420a(b)(1)(i))	US Well ID or US Well ID Associated with the Affected Facility, if applicable. * (§60.5420a(b)(1)(i))	Address of Affected Facility * (§60.5420a(b)(1)(i))	Address 2	City *	County *	State Abbreviation *	Zip Code *	Responsible Agency Facility ID (State Facility Identifier)	Description of Site Location (§60.5420a(b)(1)(i))
		e.g.: ABC Company	e.g.: XYZ Compressor Station	e.g.: 12-345-67890-12	e.g.: 123 Main Street	e.g.: Suite 100	e.g.: Brooklyn	e.g.: Kings County	e.g.: NY	e.g.: 11221		e.g.: 7 miles NE of the intersection of Hwy 123 and Hwy 456
30		HRC Operating, LLC	Vermejo	N/A	N/A	N/A	New Town	McKenzie	ND	58763		(b) (9)
31		HRC Operating, LLC	Oklahoma	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
32		HRC Operating, LLC	La Plata	N/A	N/A	N/A	New Town	McKenzie	ND	58763		
33		HRC Operating, LLC	Windom	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
34		HRC Operating, LLC	Pyramid	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
35		HRC Operating, LLC	Sneffels	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
36		HRC Operating, LLC	Bierstadt	N/A	N/A	N/A	New Town	McKenzie	ND	58763		
37		HRC Operating, LLC	Bross	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
38		HRC Operating, LLC	Pikes-Ouray	N/A	N/A	N/A	New Town	McKenzie	ND	58763		
39		HRC Operating, LLC	San Luis-Alamosito	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
40		HRC Operating, LLC	Stewart	N/A	N/A	N/A	New Town	McKenzie	ND	58763		
41		HRC Operating, LLC	Sunlight	N/A	N/A	N/A	New Town	McKenzie	ND	58763		
42		HRC Operating, LLC	Wetterhorn	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
43		HRC Operating, LLC	Wilson	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
44		HRC Operating, LLC	Antero	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
45		HRC Operating, LLC	Diente	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
46		HRC Operating, LLC	Sherman	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
47		HRC Operating, LLC	Sunshine	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		
48		HRC Operating, LLC	Tabegauche	N/A	N/A	N/A	Mandaree	Dunn	ND	58757		

VIATION (IF NO PHYSICAL ADDRESS AVAILABLE FOR SITE *)		REPORTING INFORMATION		PE Certification	ADDITIONAL INFORMATION	
Latitude of the Site (decimal degrees to 5 decimals using the North American Datum of 1983) (§60.5420a(b)(1)(i))	Longitude of the Site (decimal degrees to 5 decimals using the North American Datum of 1983) (§60.5420a(b)(1)(i))	Beginning Date of Reporting Period.* (§60.5420a(b)(1)(iii))	Ending Date of Reporting Period.* (§60.5420a(b)(1)(iii))	Please provide the file name that contains the certification signed by a qualified professional engineer for each closed vent system routing to a control device or process. * (§60.5420a(b)(12)) Please provide only one file per record.	Please enter any additional information.	Enter associated file name reference.
e.g.: 34.12345	e.g.: -101.12345	e.g.: 01/01/2016	e.g.: 06/30/2016	e.g.: Certification.pdf or XYZCompressorStation.pdf		e.g.: addlinfo.zip or XYZCompressorStation.pdf
[redacted]		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	N/A	Produces into a common battery	
		8/2/2016	8/2/2017	ClosedVentSysCertHandies.pdf	Common battery TanksPTEcalcHandies.pd	

MATION (IF NO PHYSICAL ADDRESS AVAILABLE FOR SITE *)		REPORTING INFORMATION		PE Certification	ADDITIONAL INFORMATION	
Latitude of the Site (decimal degrees to 5 decimals using the North American Datum of 1983) (§60.5420a(b)(1)(i))	Longitude of the Site (decimal degrees to 5 decimals using the North American Datum of 1983) (§60.5420a(b)(1)(i))	Beginning Date of Reporting Period.* (§60.5420a(b)(1)(iii))	Ending Date of Reporting Period.* (§60.5420a(b)(1)(iii))	Please provide the file name that contains the certification signed by a qualified professional engineer for each closed vent system routing to a control device or process. * (§60.5420a(b)(12)) Please provide only one file per record.	Please enter any additional information.	Enter associated file name reference.
e.g.: 34.12345	e.g.: -101.12345	e.g.: 01/01/2016	e.g.: 06/30/2016	e.g.: Certification.pdf or XYZCompressorStation.pdf		e.g.: addlinfo.zip or XYZCompressorStation .pdf
		8/2/2016	8/2/2017	ClosedVentSysVermejo.pdf	Common battery	TanksPTEcalcVermejo.p
		8/2/2016	8/2/2017	ClosedVentSysCertOklahoma.p	Common battery	TanksPTEcalcOklahoma
		8/2/2016	8/2/2017	ClosedVentSysCertLaPlata.pdf	Common battery	TanksPTEcalcLaPlata.pd
		8/2/2016	8/2/2017	ClosedVentSysCertWindom.pdf	Common battery	TanksPTEcalcWindom.p
		8/2/2016	8/2/2017	ClosedVentSysCertPyramid.pdf	Common battery	TanksPTEcalcPyramid.p
		8/2/2016	8/2/2017	ClosedVentSysCertSneffels.pdf	Common battery	TanksPTEcalcSneffels.pc
		8/2/2016	8/2/2017	ClosedVentSysCertBierstadt.pd	Common battery	TanksPTEcalcBierstadt.p
		8/2/2016	8/2/2017	ClosedVentSysCertBross.pdf	Common battery	TanksPTEcalcBross.pdf
		8/2/2016	8/2/2017	ClosedVentSysCertPikes.pdf	Common battery	TanksPTEcalcPikes.pdf
		8/2/2016	8/2/2017	ClosedVentSysCertSanLuis.pdf	Common battery	TanksPTEcalcSanLuis.pd
		8/2/2016	8/2/2017	ClosedVentSysCertStewart.pdf	Common battery	TanksPTEcalcStewart.pc
		8/2/2016	8/2/2017	ClosedVentSysCertSunlight.pdf	Common battery	TanksPTEcalcSunlight.pc
		8/2/2016	8/2/2017	ClosedVentSysCertWetterhorn.	Common battery	TanksPTEcalcWetterhor
		8/2/2016	8/2/2017	ClosedVentSysCertWilson.pdf	Common battery	TanksPTEcalcWilson.pdf
		8/2/2016	8/2/2017	ClosedVentSysCertAntero.pdf	Common battery	TanksPTEcalcAntero.pdf
		8/2/2016	8/2/2017	ClosedVentSysCertDiente.pdf	Common battery	TanksPTEcalcDiente.pdf
		8/2/2016	8/2/2017	ClosedVentSysCertSherman.pdf	Common battery	TanksPTEcalcSherman.p
		8/2/2016	8/2/2017	ClosedVentSysCertSunshine.pd	Common battery	TanksPTEcalcSunshine.p
		8/2/2016	8/2/2017	ClosedVentSysCertTabegauche.	Common battery	TanksPTEcalcTabegauch



40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report
For each well affected facility, an owner or operator must include the information specified in paragraphs (b)(2)(i) through (iii) of this section in all annual reports:

The asterisk (*) next to each field indicates that the corresponding field is required.

			§60.5432a Low Pressure Wells	All Well Completions		
Facility Record No. * **(Select from dropdown list -** *may need to scroll up* **)**	United States Well Number* (§60.5420a(b)(1)(ii))	Records of deviations where well completion operations with hydraulic fracturing were not performed in compliance with the requirements specified in § 60.5375a. * (§60.5420a(b)(2)(ii) and §60.5420a(c)(1)(ii))	Please provide the file name that contains the Record of Determination and Supporting Inputs and Calculations * (§60.5420a(b)(2)(iii) and §60.5420a(c)(1)(vii)) Please provide only one file per record.	Well Completion ID * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(i))	Well Location * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Date of Onset of Flowback Following Hydraulic Fracturing or Refracturing * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))
	e.g.: 12-345-67890-12	e.g.: On October 12, 2016, a separator was not onsite for the first 3 hours of the flowback period.	e.g.: lowpressure.pdf or XYZCompressorStation.pdf	e.g.: Completion ABC	e.g.: 34.12345 latitude, -101.12345 longitude	e.g.: 10/16/16
1	33-025-02974	None	N/A	FB 148-94-22A-27-12H(LL) - Handies	(b) (9)	9/1/2016
2	33-025-02926	None	N/A	FB 148-94-22A-27-11H - Handies		9/3/2016
3	33-053-06585	None	N/A	FB 152-93-7C-6-7H - Vermejo		11/2/2016
4	33-053-07548	None	N/A	FB 152-93-7C-6-5H - Vermejo 3		10/30/2016
5	33-053-06586	None	N/A	FB 152-93-7C-6-6H - Vermejo		10/31/2016
6	33-053-07549	None	N/A	FB 152-93-7C-6-14H - Vermejo 3		10/28/2016
7	33-053-06581	None	N/A	FB 152-93-7C-6-11H - Vermejo 2		11/4/2016
8	33-053-06584	None	N/A	FB 152-93-7C-6-8H - Vermejo		11/5/2016
9	33-053-06583	None	N/A	FB 152-93-7C-6-9H - Vermejo		11/7/2016
10	33-053-06582	None	N/A	FB 152-93-7C-6-10H - Vermejo 2		11/2/2016
11	33-053-06580	None	N/A	FB 152-93-7C-6-12H - Vermejo 2		11/6/2016
12	33-053-06579	None	N/A	FB 152-93-7C-6-13H - Vermejo 2		11/8/2016
13	33-025-03118	None	N/A	FB 148-94-36D-25-10H - Oklahoma 2		11/8/2016
14	33-025-03116	None	N/A	FB 148-94-36D-25-11H - Oklahoma 2		11/19/2016
15	33-025-03117	None	N/A	FB 147-94-1A-12-12H - Oklahoma 2		11/21/2016
16	33-025-03115	None	N/A	FB 147-94-1A-12-11H - Oklahoma 2		11/18/2016
17	33-053-07231	None	N/A	FB 152-94-22D-15-10H - LaPlata		12/8/2016
18	33-053-07232	None	N/A	FB 152-94-22D-15-11H - LaPlata		12/12/2016
19	33-025-02243	None	N/A	FB 148-94-36C-25-4H - Windom		5/20/2017
20	33-025-02245	None	N/A	FB 148-94-36C-25-5H - Windom		5/16/2017

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report
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The asterisk (*) next to each field indicates that the corresponding field is required.

			§60.5432a Low Pressure Wells	All Well Completions		
Facility Record No. * **(Select from dropdown list -** *may need to scroll up* **)**	United States Well Number* (§60.5420a(b)(1)(ii))	Records of deviations where well completion operations with hydraulic fracturing were not performed in compliance with the requirements specified in § 60.5375a. * (§60.5420a(b)(2)(ii) and §60.5420a(c)(1)(ii))	Please provide the file name that contains the Record of Determination and Supporting Inputs and Calculations * (§60.5420a(b)(2)(iii) and §60.5420a(c)(1)(vii)) Please provide only one file per record.	Well Completion ID * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(i))	Well Location * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Date of Onset of Flowback Following Hydraulic Fracturing or Refracturing * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))
	e.g.: 12-345-67890-12	e.g.: On October 12, 2016, a separator was not onsite for the first 3 hours of the flowback period.	e.g.: lowpressure.pdf or XYZCompressorStation.pdf	e.g.: Completion ABC	e.g.: 34.12345 latitude, -101.12345 longitude	e.g.: 10/16/16
21	33-025-02641	None	N/A	FB 148-94-36C-25-6H - Windom	(b) (9)	5/10/2017
22	33-025-02963	None	N/A	FB 148-94-36C-25-7H - Windom		5/15/2017
23	33-025-02965	None	N/A	FB 148-94-36C-25-8H - Windom		5/10/2017
24	33-025-02644	None	N/A	FB 148-94-36C-25-12H - Windom		5/18/2017
25	33-025-03132	None	N/A	FB 148-94-35D-26-11H - Pyramid		6/6/2017
26	33-025-03135	None	N/A	FB 148-94-35D-26-12H - Pyramid		6/6/2017
27	33-025-03136	None	N/A	FB 148-94-35D-26-13H - Pyramid		6/6/2017
28	33-025-02908	None	N/A	FB 148-94-35C-26-9H - Sneffels 3		7/31/2017

Well Affected Facilities Required to Comply with §60.5375a(a) and §60.5375a(f)

Time of Onset of Flowback Following Hydraulic Fracturing or Refracturing * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Date of Each Attempt to Direct Flowback to a Separator * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Time of Each Attempt to Direct Flowback to a Separator * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Date of Each Occurrence of Returning to the Initial Flowback Stage * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Time of Each Occurrence of Returning to the Initial Flowback Stage * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Date Well Shut In and Flowback Equipment Permanently Disconnected or the Startup of Production * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Time Well Shut In and Flowback Equipment Permanently Disconnected or the Startup of Production * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Duration of Flowback in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Duration of Recovery in Hours * *(Not Required for Wells Complying with §60.5375a(f))* (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A))
e.g.: 10 a.m.	e.g.: 10/16/16	e.g.: 10 a.m.	e.g.: 10/16/16	e.g.: 10 a.m.	e.g.: 10/16/16	e.g.: 10 a.m.	e.g.: 5	e.g.: 5
4 p.m.	9/1/2016	7 p.m.	--	--	9/3/2016	2 a.m.	35	--
4 a.m.	9/3/2016	8 a.m.	--	--	9/4/2016	5 p.m.	39	--
8 p.m.	11/3/2016	12 a.m.	--	--	11/5/2016	9 a.m.	62	--
11 p.m.	10/31/2016	3 a.m.	--	--	11/1/2016	6 p.m.	44	--
3 a.m.	10/31/2016	6 a.m.	--	--	11/2/2016	4 p.m.	62	--
2 p.m.	10/28/2016	8 p.m.	--	--	10/30/2016	5 p.m.	52	--
9 a.m.	11/4/2016	1 p.m.	--	--	11/6/2016	4 a.m.	44	--
9 p.m.	11/6/2016	12 a.m.	--	--	11/7/2016	10 a.m.	38	--
4 p.m.	11/7/2016	8 p.m.	--	--	11/9/2016	10 a.m.	43	--
3 a.m.	11/2/2016	8 a.m.	--	--	11/3/2016	5 p.m.	39	--
11 a.m.	11/6/2016	3 p.m.	--	--	11/8/2016	9 a.m.	47	--
4 p.m.	11/8/2016	8 p.m.	--	--	11/10/2016	5 a.m.	38	--
2 a.m.	11/9/2016; 11/22/2016; 11/23/2016	11/9/2016: 8 a.m. 11/22/2016: 8 p.m. 11/23/2016: 3 a.m.	11/22/2016	7 p.m.	11/23/2016	7 p.m.	275	133
2 p.m.	11/19/2016	6 p.m.	--	--	11/21/2016	4 a.m.	39	--
9 a.m.	11/21/2016	1 p.m.	--	--	11/22/2016	1 p.m.	29	--
7 p.m.	11/19/2016; 11/23/2016; 11/24/2016	11/19/2016: 8 a.m. 11/23/2016: 11 p.m. 11/24/2016: 4 p.m.	11/23/2016	11 p.m.	11/25/2016	3 a.m.	118	--
9 a.m.	12/8/2016; 12/9/2016	12/8/2016 12 p.m. 12/9/16: 6 p.m. 12/12/2016: 8 p.m.	--	--	12/11/2016	6 a.m.	70	--
5 a.m.	12/12/2016; 12/13/2016	12/13/2016: 9 a.m.	--	--	12/14/2016	5 a.m.	50	--
3 a.m.	5/20/2017	8 a.m.	--	--	5/21/2017	9 a.m.	31	--
2 p.m.	5/16/2017	6 p.m.	--	--	5/17/2017	7 p.m.	30	--

Well Affected Facilities Required to Comply with §60.5375a(a) and §60.5375a(f)

Time of Onset of Flowback Following Hydraulic Fracturing or Refracturing * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Date of Each Attempt to Direct Flowback to a Separator * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Time of Each Attempt to Direct Flowback to a Separator * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Date of Each Occurrence of Returning to the Initial Flowback Stage * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Time of Each Occurrence of Returning to the Initial Flowback Stage * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Date Well Shut In and Flowback Equipment Permanently Disconnected or the Startup of Production * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Time Well Shut In and Flowback Equipment Permanently Disconnected or the Startup of Production * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Duration of Flowback in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Duration of Recovery in Hours * *(Not Required for Wells Complying with §60.5375a(f))* (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A))
e.g.: 10 a.m.	e.g.: 10/16/16	e.g.: 10 a.m.	e.g.: 10/16/16	e.g.: 10 a.m.	e.g.: 10/16/16	e.g.: 10 a.m.	e.g.: 5	e.g.: 5
9 a.m.	5/10/2017; 5/13/2017	5/10/2017: 8 p.m. 5/13/2017: 4 a.m.	--	--	5/15/2017	6 p.m.	117	--
1 a.m.		5/15/2017 7 a.m.	--	--	5/16/2017	10 a.m.	34	--
5 p.m.		5/11/2017 6 p.m.	--	--	5/13/2017	5 p.m.	73	--
8 a.m.		5/18/2017 2 p.m.	--	--	5/19/2017	8 p.m.	37	--
12 a.m.	6/6/2017; 6/8/2017; 6/9/2017; 6/16/2017	6/6/2017: 11 a.m. 6/8/2017: 8 a.m., 7 p.m. 6/9/2017: 4 a.m. 6/16/2017: 10 a.m.	--	--	6/17/2017	5 p.m.	112	--
4 a.m.	6/6/2017; 6/7/2017; 6/8/2017; 6/14/2017; 6/15/2017	6/6/2017: 10 a.m., 4 p.m. 6/7/2017: 1 p.m. 6/8/2017: 12 a.m. 6/14/2017: 8 a.m. 6/15/2017: 8 a.m.	--	--	6/15/2017	9 p.m.	115	--
1 a.m.	6/6/2017; 6/18/2017	6/6/2017: 3 p.m. 6/18/2017: 1 a.m.	--	--	6/19/2017	7 p.m.	137	--
4 a.m.	8/1/2017; 8/7/2017	8/1/2017: 5 a.m. 8/7/17: 6 a.m.	--	--	8/10/2017	3 p.m.	252	--

Disposition of Recovery * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Duration of Combustion in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Duration of Venting in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Reason for Venting in lieu of Capture or Combustion * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))
e.g.: Used as onsite fuel	e.g.: 5	e.g.: 5	e.g: No onsite storage or combustion unit was available at the time of completion.
Flared	31	0	N/A
Flared	34	0	N/A
Flared	54	0	N/A
Flared	39	0	N/A
Flared	58	0	N/A
Flared	47	0	N/A
Flared	39	0	N/A
Flared	33	0	N/A
Flared	38	0	N/A
Flared	33	0	N/A
Flared	43	0	N/A
Flared	34	0	N/A
Sold and Flared	238	0	N/A
Flared	34	0	N/A
Flared	25	0	N/A
Flared	89	0	N/A
Flared	46	0	N/A
Flared	36	0	N/A
Flared	25	0	N/A
Flared	25	0	N/A

Disposition of Recovery * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Duration of Combustion in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Duration of Venting in Hours * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))	Reason for Venting in lieu of Capture or Combustion * (§60.5420a(b)(2)(i) and §60.5420a(c)(1)(iii)(A)-(B))
e.g.: Used as onsite fuel	e.g.: 5	e.g.: 5	e.g: No onsite storage or combustion unit was available at the time of completion.
Flared		89	0 N/A
Flared		28	0 N/A
Flared		48	0 N/A
Flared		30	0 N/A
Flared		86	0 N/A
Flared		49	0 N/A
Flared		116	0 N/A
Flared		103	0 N/A

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For each centrifugal compressor affected facility, an owner or operator must include the information specified in paragraphs (b)(3)(i) through (iv) of this section in all annual reports:

The asterisk (*) next to each field indicates that the corresponding field is required.

Facility Record No. * **(Select from dropdown list** - *may need to scroll up* **)**	Compressor ID * (§60.5420a(b)(1)(ii))	For centrifugal compressors using a wet seal system, was the compressor constructed, modified or reconstructed during the reporting period? * (§60.5420a(b)(3)(i))	Deviations where the centrifugal compressor was not operated in compliance with requirements * (§60.5420a(b)(3)(ii) and §60.5420a(c)(2))	Record of Each Closed Vent System Inspection * (§60.5420a(b)(3)(iii) and §60.5420a(c)(6))	Record of Each Cover Inspection * (§60.5420a(b)(3)(iii) and §60.5420a(c)(7))
	e.g.: Comp-12b	e.g.: modified	e.g.: On October 12, 2016, the pilot flame was not functioning on the combustion unit controlling the compressor.	e.g.: Annual inspection conducted on 12/16/16. No defects observed. No detectable emissions observed.	e.g.: Annual inspection conducted on 12/16/16. No defects observed.
	n/a				

ntrifugal Compressors Required to Comply with §60.5380a(a)(2) - Cover and Closed Vent System Requirements				Centrifugal Compress
If you are subject to the bypass requirements of §60.5416a(a)(4) and you monitor the bypass with a flow indicator, a record of each time the alarm is sounded. * (§60.5420a(b)(3)(iii) and §60.5420a(c)(8))	If you are subject to the bypass requirements of §60.5416a(a)(4) and you use a secured valve, a record of each monthly inspection. * (§60.5420a(b)(3)(iii) and §60.5420a(c)(8))	If you are subject to the bypass requirements of §60.5416a(a)(4) and you use a lock-and-key valve, a record of each time the key is checked out. * (§60.5420a(b)(3)(iii) and §60.5420a(c)(8))	Record of No Detectable Emissions Monitoring Conducted According to §60.5416a(b) * (§60.5420a(b)(3)(iii) and §60.5420a(c)(9))	Records of the Schedule for Carbon Replacement * (determined by design analysis) (§60.5420a(b)(3)(iii) and §60.5420a(c)(10))
e.g.: On 4/5/17, the bypass alarm sounded for 2 mintues.	e.g.: Monthly inspection performed 4/15/17. Valve was maintained in the non-diverting position. Vent stream was not diverted through the bypass.	e.g.: The key was not checked out during the annual reporting period.	e.g.: Annual inspection conducted on 12/16/16. The highest reading using the FID was 300 ppmv.	e.g.: Carbon must be replaced every 2 years.

ors with Carbon Adsorption	Centrifugal Compressors Subject to Control Device Requirements of §60.5412a(a)-(c)							
Records of Each Carbon Replacement * (§60.5420a(b)(3)(iii) and §60.5420a(c)(10))	Minimum/Maximum Operating Parameter Value * (§60.5420a(b)(3)(iii) and §60.5420a(c)(11))	Please provide the file name that contains the Continuous Parameter Monitoring System Data * (§60.5420a(b)(3)(iii) and §60.5420a(c)(11)) Please provide the file name that contains.	Please provide the file name that contains the Calculated Averages of Continuous Parameter Monitoring System Data * (§60.5420a(b)(3)(iii) and §60.5420a(c)(11)) Please provide the file name that contains.	Please provide the file name that contains the Results of All Compliance Calculations * (§60.5420a(b)(3)(iii) and §60.5420a(c)(11)) Please provide the file name that contains.	Please provide the file name that contains the Results of All Inspections * (§60.5420a(b)(3)(iii) and §60.5420a(c)(11)) Please provide the file name that contains.	Make of Purchased Device * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(i))	Model of Purchased Device * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(i))	Serial Number of Purchased Device * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(i))
e.g.: Carbon was not replaced during the annual reporting period.	e.g.: Minimum temperature differential across catalytic oxidizer bed of 20°F.	e.g.: CPMS_Comp-12b.pdf **or** XYZCompressorStation.pdf	e.g.: CPMSAvg_Comp-12b.pdf **or** XYZCompressorStation.pdf	e.g.: ComplRslts_Comp-12b.pdf **or** XYZCompressorStation.pdf	e.g.: InspectRslts_Comp-12b.pdf **or** XYZCompressorStation.pdf	e.g.: Incinerator Guy	e.g.: 400 Combustor	e.g.: 123B3D392

Centrifugal Compressors Using a Wet Seal System Constructed, Modified, or Reconstructed During Reporting Period with Control Device Tested Under §60.5413a(d)

Date of Purchase (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(ii))	Please provide the file name that contains the Copy of Purchase Order (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(iii)) Please provide the file name that contains.	Latitude of Centrifugal Compressor (Decimal Degrees to 5 Decimals Using the North American Datum of 1983) * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(iv))	Longitude of Centrifugal Compressor (Decimal Degrees to 5 Decimals Using the North American Datum of 1983) * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(iv))	Latitude of Control Device (Decimal Degrees to 5 Decimals Using the North American Datum of 1983) * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(iv))	Longitude of Control Device (Decimal Degrees to 5 Decimals Using the North American Datum of 1983) * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(iv))	As an Alternative to Latitude and Longitude, please provide the file name that contains the Digital Photograph of Device either with Imbedded Latituded and Longitude or Visible GPS (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(vii)) Please provide the file name that contains.	Inlet Gas Flow Rate * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(v))	Please provide the file name that contains the Records of Pilot Flame Present at All Times of Operation * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(vi)(A)) Please provide the file name that contains.
e.g.: 12/10/16	e.g.: purchase_order.pdf **or** XYZCompressorStation.pdf	e.g.: 34.12345	e.g.: -101.12345	e.g.: 34.12340	e.g.: -101.12340	e.g.: 400_combustor.pdf **or** XYZCompressorStation.pdf	e.g.: 3000 scfh	e.g.: pilotflame.pdf **or** XYZCompressorStation.pdf

Please provide the file name that contains the Records of No Visible Emissions Periods Greater Than 1 Minute During Any 15-Minute Period * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(vi)(B)) Please provide the file name that contains.	Please provide the file name that contains the Records of Maintenance and Repair Log * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(vi)(C)) Please provide the file name that contains.	Please provide the file name that contains the Records of Visible Emissions Test Following Return to Operation From Maintenance/Repair Activity * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(vi)(D)) Please provide the file name that contains.	Please provide the file name that contains the Records of Manufacturer's Written Operating Instructions, Procedures and Maintenance Schedule * (§60.5420a(b)(3)(iv) and §60.5420a(c)(2)(vi)(E)) Please provide the file name that contains.
e.g.: noemissions.pdf **or** XYZCompressorStation.pdf	e.g.: maintainlog.pdf **or** XYZCompressorStation.pdf	e.g.: emistest.pdf **or** XYZCompressorStation.pdf	e.g.: manufinsruct.pdf **or** XYZCompressorStation.pdf

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For each reciprocating compressor affected facility, an owner or operator must include the information specified in paragraphs (b)(4)(i) and (ii) of this section in all annual reports:

The asterisk (*) next to each field indicates that the corresponding field is required.

Facility Record No. * **(Select from dropdown list** - *may need to scroll up* **)**	Compressor ID * (§60.5420a(b)(1)(ii))	Are emissions from the rod packing unit being routed to a process through a closed vent system under negative pressure? * (§60.5420a(b)(4)(i))	If emissions are not routed to a process through a closed vent system under negative pressure, what are the cumulative number of hours or months of operation since initial startup or the previous rod packing replacement (whichever is later)? * (§60.5420a(b)(4)(i))	Units of Time Measurement * (§60.5420a(b)(4)(i))	Deviations where the reciprocating compressor was not operated in compliance with requirements* (§60.5420(b)(4)(ii) and §60.5420a(c)(3)(iii))
	e.g.: Comp-12b	e.g.: no	e.g.: 2	e.g.: months	e.g.: Rod packing replacement exceeded 36 months. Replacement occurred after 37 months.
	n/a				

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For each pneumatic controller affected facility, an owner or operator must include the information specified in paragraphs (b)(5)(i) through (iii) of this section in all annual reports:

The asterisk (*) next to each field indicates that the corresponding field is required.

					Pneumatic Controllers with a Natural Gas Bleed Rate Greater than 6 scfh		
Facility Record No. * **(Select from dropdown list** - *may need to scroll up* **)**	Pneumatic Controller Identification * (§60.5420a(b)(1)(ii), §60.5420a(b)(5)(i), and §60.5390a(b)(2) or §60.5390a(c)(2))	Was the pneumatic controller constructed, modified or reconstructed during the reporting period? * (§60.5420a(b)(5)(i))	Month of Installation, Reconstruction, or Modification* (§60.5420a(b)(5)(i) and §60.5390a(b)(2) or §60.5390a(c)(2))	Year of Installation, Reconstruction, or Modification* (§60.5420a(b)(5)(i) and §60.5390a(b)(2) or §60.5390a(c)(2))	Documentation that Use of a Pneumatic Controller with a Natural Gas Bleed Rate Greater than 6 Standard Cubic Feet per Hour is required * (§60.5420a(b)(5)(ii))	Reasons Why * (§60.5420a(b)(5)(ii))	Records of deviations where the pneumatic controller was not operated in compliance with requirements* (§60.5420a(b)(5)(iii) and §60.5420a(c)(4)(v))
	e.g.: Controller 12A	e.g.: modified	e.g.: February	e.g.: 2017	e.g.: Controller has a bleed rate of 8 scfh.	e.g.: safety bypass controller requires use of a high-bleed controller	e.g.: Controller was not tagged with month and year of installation.
	n/a						

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report
For each storage vessel affected facility, an owner or operator must include the information specified in paragraphs (b)(6)(i) through (vii) of this section in all annual reports:

The asterisk (*) next to each field indicates that the corresponding field is required.

	Facility Record No. * (Select from dropdown list - *may need to scroll up*)	Storage Vessel ID * (§60.5420a(b)(1)(ii) and §60.5420a(b)(6)(i))	Was the storage vessel constructed, modified or reconstructed during the reporting period? * (§60.5420a(b)(6)(i))	Latitude of Storage Vessel (Decimal Degrees to 5 Decimals Using the North American Datum of 1983) * (§60.5420a(b)(6)(i))	Longitude of Storage Vessel (Decimal Degrees to 5 Decimals Using the North American Datum of 1983) * (§60.5420a(b)(6)(i))	If new affected facility or if returned to service during the reporting period, provide documentation of the VOC emission rate determination according to §60.5365a(e).* (§60.5420a(b)(6)(ii))	Records of deviations where the storage vessel was not operated in compliance with requirements * (§60.5420a(b)(6)(iii) and §60.5420a(c)(5)(iii))
		e.g.: Tank 125	e.g.: modified	e.g.: 34.12345	e.g.: -101.12345	e.g.: VOC emission rate is 6.5 tpy. See file rate_determination.pdf for more information.	e.g.: On October 12, 2016, the pilot flame was not functioning on the combustion unit controlling the storage vessel.
1	Antero		No	(b) (9)	(b) (9)	VOC emission rate is 54.32 tpy - AnteroTanksF	N/A
2	Bross		No			VOC emission rate is 149.42 tpy - BrossTanksF	N/A
3	Diente		No			VOC emission rate is 91.47 typ - DienteTanksF	N/A
4	LaPlata		Yes			VOC emission rate is 51.76 tpy - LaPlataTanks	N/A
5	Pikes - Ouray		No			VOC emission rate is 184.21 tpy - Pikes-Ouray	N/A
6	San Luis - Alamosito		No			VOC emission rate is 187.32 tpy - SanLuis-Alar	N/A
7	Sherman		No			VOC emission rate is 82.74 tpy - ShermanTank	N/A
8	Sneffels		No			VOC emission rate is 107.13 tpy - SneffelsTanl	N/A
9	Stewart		Yes			VOC emission rate is 134.27 tpy - Stewart-Ver	N/A
10	Sunshine		No			VOC emission rate is 141.31 tpy - SunshineTar	N/A
11	Tabeguache		No			VOC emission rate is 101.25 tpy - Tabeguache	N/A
12	Vermejo		Yes			VOC emission rate is 134.27 tpy - Stewart-Ver	N/A
13	Wilson		Yes			VOC emission rate is 51.06 tpy - WilsonTanksF	N/A
14	Windom		Yes			VOC emission rate is 115.26 tpy - WindomTan	N/A

					Storage Vessels Constructed, Modif				
Have you met the requirements specified in §60.5410a(h)(2) and (3)?* (§60.5420a(b)(6)(iv))	Removed from service during the reporting period? * (§60.5420a(b)(6)(v))	If removed from service, the date removed from service. * (§60.5420a(b)(6)(v))	Returned to service during the reporting period? * (§60.5420a(b)(6)(vi))	If returned to service, the date returned to service. * (§60.5420a(b)(6)(vi))	Make of Purchased Device * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(A))	Model of Purchased Device * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(A))	Serial Number of Purchased Device * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(A))	Date of Purchase * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(B))	Copy of Purchase Order * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(C))
e.g.: Yes	e.g.: Yes	e.g.: 11/15/16	e.g.: Yes	e.g.: 11/15/16	e.g.: Incinerator Guy	e.g.: 400 Combustor	e.g.: 123B3D392	e.g.: 12/10/16	e.g.: purchase_order.pdf or XYZCompressorStation.pdf
Yes	N/A	N/A	N/A	N/A	Steffes Corp	SHC-6		From yard inventory	
Yes	N/A	N/A	N/A	N/A	Zeeco, Inc.	MJAG-3_MJAG-3_MJAG-3	23575-010	9/25/2014	zeecopo140925.pdf
Yes	N/A	N/A	N/A	N/A	Steffes Corp	SHC-6		From yard inventory	
Yes	N/A	N/A	N/A	N/A	Steffes Corp	SHC-6	SCHC0357	6/7/2016	laplataflareinvoice.pdf
Yes	N/A	N/A	N/A	N/A	Zeeco, Inc.	MJAG-3_MJAG-3-30	25156-007	6/1/2016	pikes-ourayflareinvoice.pc
Yes	N/A	N/A	N/A	N/A	Zeeco, Inc.	MJAG-3_MJAG-3_MJAG-3	25156-001	9/25/2014	zeecopo140925.pdf
Yes	N/A	N/A	N/A	N/A	Zeeco, Inc.	MJAG-3_MJAG-3_MJAG-3	23575-006	9/25/2014	zeecopo140925.pdf
Yes	N/A	N/A	N/A	N/A	Zeeco, Inc.	MJAG-3_MJAG-3_MJAG-3	23575-001	9/25/2014	zeecopo140925.pdf
Yes	N/A	N/A	N/A	N/A	Steffes Corp	SHC-6	SCHC0337	8/24/2016	stewartflareinvoice.pdf
Yes	N/A	N/A	N/A	N/A	Zeeco, Inc.	MJAG-3_MJAG-3_MJAG-3	23575-004	9/25/2014	zeecopo140925.pdf
Yes	N/A	N/A	N/A	N/A	Zeeco, Inc.	MJAG-3_MJAG-3_MJAG-3	25156-002	9/25/2014	zeecopo140925.pdf
Yes	N/A	N/A	N/A	N/A	Zeeco, Inc.	MJAG-3_MJAG-3-30	25156-005	2/9/2015	zeecopo150209.pdf
Yes	N/A	N/A	N/A	N/A	Steffes Corp	SHC-6	SCHC0215; SCHC0198	From yard inventory	
Yes	N/A	N/A	N/A	N/A	Zeeco, Inc.	MJAG-3_MJAG-3_MJAG-3	25156-004	9/25/2014	zeecopo140925.pdf

ied, Reconstructed or Returned to Service During Reporting Period that Comply with §60.5395a(a)(2) with a Control Device Tested Under § 60.5413a(d)

Latitude of Control Device (Decimal Degrees to 5 Decimals Using the North American Datum of 1983) * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(D))	Longitude of Control Device (Decimal Degrees to 5 Decimals Using the North American Datum of 1983) * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(D))	Inlet Gas Flow Rate * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(E))	Please provide the file name that contains the Records of Pilot Flame Present at All Times of Operation * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(F)(*1*)) Please provide only one file per record.	Please provide the file name that contains the Records of No Visible Emissions Periods Greater Than 1 Minute During Any 15-Minute Period * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(F)(*2*)) Please provide only one file per record.	Please provide the file name that contains the Records of Maintenance and Repair Log * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(F)(*3*)) Please provide only one file per record.	Please provide the file name that contains the Records of Visible Emissions Test Following Return to Operation From Maintenance/Repair Activity * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(F)(*4*)) Please provide only one file per record.	Please provide the file name that contains the Records of Manufacturer's Written Operating Instructions, Procedures and Maintenance Schedule * (§60.5420a(b)(6)(vii) and §60.5420a(c)(5)(vi)(F)(*5*)) Please provide only one file per record.
e.g.: 34.12340	e.g.: -101.12340	e.g.: 3000 scfh	e.g.: pilotflame.pdf or XYZCompressorStation.pdf	e.g.: noemissions.pdf or XYZCompressorStation.pdf	e.g.: maintainlog.pdf or XYZCompressorStation.pdf	e.g.: emistest.pdf or XYZCompressorStation.pdf	e.g.: manufinsruct.pdf or XYZCompressorStation.pdf
47.6178	-102.70607	3.0 MMSCFD					steffesflaremanual.pdf
47.6176	-102.74876	12.0 MMSCF					
47.58713	-102.64675	3.0 MMSCFD					steffesflaremanual.pdf
47.96478	-102.68855	3.0 MMSCFD					steffesflaremanual.pdf
47.96361	-102.62653	6.0 MMSCFD					zeeco30ftflaremanual.pdf
47.62087	-102.73266	12.0 MMSCF					
47.63346	-102.6891	12.0 MMSCF					
47.58936	-102.62286	12.0 MMSCF					
47.99063	-102.6365	3.0 MMSCFD					steffesflaremanual.pdf
47.6187	-102.74224	12.0 MMSCF					
47.60439	-102.64772	12.0 MMSCF					
47.99265	-102.63817	6.0 MMSCFD					zeeco30ftflaremanual.pdf
47.58946	-102.65676	3.0 MMSCFD					steffesflaremanual.pdf
47.59028	-102.60126	12.0 MMSCF					

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For the collection of fugitive emissions components at each well site and the collection of fugitive emissions components at each compressor station within the company-defined area, an owner or operator must include the records of each

The asterisk (*) next to each field indicates that the corresponding field is required.

Facility Record No. * (Select from dropdown list - *may need to scroll up*)	Identification of Each Affected Facility * (§60.5420a(b)(1))	Date of Survey * (§60.5420a(b)(7)(i))	Survey Begin Time * (§60.5420a(b)(7)(ii))	Survey End Time * (§60.5420a(b)(7)(ii))	Name of Surveyor * (§60.5420a(b)(7)(iii))	Ambient Temperature During Survey * (§60.5420a(b)(7)(iv))	Sky Conditions During Survey * (§60.5420a(b)(7)(iv))	Maximum Wind Speed During Survey * (§60.5420a(b)(7)(iv))	Monitoring Instrument Used * (§60.5420a(b)(7)(v))
	e.g.: Well Site ABC	e.g.: 8/13/17	e.g.: 10:00 am	e.g.: 1:00 pm	e.g.: John Smith	e.g.: 90°F	e.g.: Sunny, no clouds	e.g.: 2 mph	e.g.: Company ABC optical gas imaging camera
1	Handies	5/24/2017	12:15 p.m.	12:30 p.m.	Julia Traster	72°F	Clear	14 mph	FLIR 300 OGI camera
2	Vermejo	7/17/2017	14:47 p.m.	15:10 p.m.	Julia Traster	80°F	Clear	10 mph	FLIR 300 OGI camera
3	Oklahoma	6/20/2017	12:15 p.m.	12:30 p.m.	Julia Traster	75°F	Cloudy	3 mph	FLIR 300 OGI camera
4	La Plata	6/21/2017	15:00 p.m.	15:20 p.m.	Julia Traster	74°F	Clear	11 mph	FLIR 300 OGI camera
5	Windom	6/20/2017	11:49 a.m.	12:05 p.m.	Julia Traster	75°F	Cloudy	3 mph	FLIR 300 OGI camera
6	Pyramid	6/20/2017	11:19 a.m.	11:40 a.m.	Julia Traster	75°F	Cloudy	3 mph	FLIR 300 OGI camera
7	Sneffels	7/13/2017	13:02 p.m.	13:20 p.m.	Julia Traster	68°F	Clear	11 mph	FLIR 300 OGI camera
8	Bierstadt	6/21/2017	16:10 p.m.	16:30 p.m.	Julia Traster	74°F	Clear	11 mph	FLIR 300 OGI camera
9	Bross	7/13/2017	14:28 p.m.	14:40 p.m.	Julia Traster	73°F	Clear	13 mph	FLIR 300 OGI camera
10	Pikes-Ouray	7/17/2017	15:21 p.m.	15:41 p.m.	Julia Traster	80°F	Clear	10 mph	FLIR 300 OGI camera
11	San Luis-Alamosito	7/13/2017	13:59 p.m.	14:10 p.m.	Julia Traster	73°F	Clear	13 mph	FLIR 300 OGI camera
12	Stewart	6/21/2017	15:40 p.m.	16:00 p.m.	Julia Traster	74°F	Clear	11 mph	FLIR 300 OGI camera
13	Wetterhorn	5/23/2017	15:02 p.m.	15:18 p.m.	Julia Traster	67°F	Clear	6 mph	FLIR 300 OGI camera
14	Wilson	7/13/2017	12:16 p.m	12:26 p.m.	Julia Traster	66°F	Clear	11 mph	FLIR 300 OGI camera
15	Antero	7/13/2017	11:45 a.m.	12:00 p.m.	Julia Traster	66°F	Clear	11 mph	FLIR 300 OGI camera
16	Diente	7/13/2017	12:47 p.m.	12:57 p.m.	Julia Traster	66°F	Clear	11 mph	FLIR 300 OGI camera
17	Sherman	7/13/2017	13:35 p.m.	13:50 p.m.	Julia Traster	71°F	Clear	13 mph	FLIR 300 OGI camera
18	Sunshine	7/13/2017	14:15 p.m.	14:24 p.m.	Julia Traster	73°F	Clear	13 mph	FLIR 300 OGI camera
19	Tabeguache	7/13/2017	12:32 p.m.	12:42 p.m.	Julia Traster	66°F	Clear	11 mph	FLIR 300 OGI camera

monitoring survey including the information specified in paragraphs (b)(7)(i) through (xii) of this section in all annual reports:

Deviations From Monitoring Plan (If none, state none.) * (§60.5420a(b)(7)(vi))	Type of Component for which Fugitive Emissions Detected * (§60.5420a(b)(7)(vii))	Number of Each Component Type for which Fugitive Emissions Detected * (§60.5420a(b)(7)(vii))	Type of Component Not Repaired as Required in §60.5397a(h) * (§60.5420a(b)(7)(viii))	Number of Each Component Type Not Repaired as Required in § 60.5397a(h) * (§60.5420a(b)(7)(viii))	Type of Difficult-to-Monitor Components Monitored * (§60.5420a(b)(7)(ix))	Number of Each Difficult-to-Monitor Component Type Monitored * (§60.5420a(b)(7)(ix))	Type of Unsafe-to-Monitor Component Monitored * (§60.5420a(b)(7)(ix))
e.g.: None	e.g.: Valve	e.g.: 3	e.g.: Valve	e.g.: 1	e.g.: Valve	e.g.: 1	e.g.:Valve
None	Thief hatch	1	N/A	N/A	N/A	N/A	N/A
None	PR Valve	1	N/A	N/A	N/A	N/A	N/A
None	Thief hatch	9	N/A	N/A	N/A	N/A	N/A
None	Thief hatch	4	N/A	N/A	N/A	N/A	N/A
None	Thief hatch, PR Valve	12; 3	N/A	N/A	N/A	N/A	N/A
None	PR Valve	3	N/A	N/A	N/A	N/A	N/A
None	Thief hatch, PR Valve	1; 1	N/A	N/A	N/A	N/A	N/A
None	None	0	N/A	N/A	N/A	N/A	N/A
None	Thief hatch, PR Valve	2; 1	N/A	N/A	N/A	N/A	N/A
None	PR Valve	1	N/A	N/A	N/A	N/A	N/A
None	Thief hatch	1	N/A	N/A	N/A	N/A	N/A
None	PR Valve	1	N/A	N/A	N/A	N/A	N/A
None	None	0	N/A	N/A	N/A	N/A	N/A
None	PR Valve	1	N/A	N/A	N/A	N/A	N/A
None	Thief hatch, PR Valve	1; 1	N/A	N/A	N/A	N/A	N/A
None	Thief hatch	3	N/A	N/A	N/A	N/A	N/A
None	Thief hatch, PR Valve	3; 1	N/A	N/A	N/A	N/A	N/A
None	Thief hatch	3	N/A	N/A	N/A	N/A	N/A
None	Thief hatch, PR Valve	1; 1	N/A	N/A	N/A	N/A	N/A

						OGI
Number of Each Unsafe-to-Monitor Component Type Monitored * (§60.5420a(b)(7)(ix))	Date of Successful Repair of Fugitive Emissions Component * (§60.5420a(b)(7)(x))	Type of Component Placed on Delay of Repair * (§60.5420a(b)(7)(xi))	Number of Each Component Type Placed on Delay of Repair * (§60.5420a(b)(7)(xi))	Explanation for Delay of Repair * (§60.5420a(b)(7)(xi))	Type of Instrument Used to Resurvey Repaired Components Not Repaired During Original Survey * (§60.5420a(b)(7)(xii))	Training and Experience of Surveyor * (§60.5420a(b)(7)(iii))
e.g.: 1	e.g.: 11/10/16	e.g.: Valve	e.g.: 1	e.g.: Unsafe to repair until next shutdown	e.g.: Company ABC optical gas imaging camera	e.g.: Trained thermographer; completed 40-hour course at XYZ Training Center. Has 10 years of experience with OGI surveys.
N/A	5/26/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/19/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	6/27/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	6/23/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/10/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	6/22/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/18/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	N/A	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/18/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/19/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/18/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	6/23/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	N/A	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/17/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/17/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/18/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/17/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/18/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T
N/A	7/17/2017	N/A	N/A	N/A	FLIR 300 OGI camera	Trained thermographer, completed 24 hour course at Infrard T

40 CFR Part 60 - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 - 60.5420a(b) Annual Report

For each pneumatic pump affected facility, an owner or operator must include the information specified in paragraphs (b)(8)(i) through (iii) of this section in all annual reports:

The asterisk (*) next to each field indicates that the corresponding field is required.

					Pneumatic Pumps Previously Reported that have a Change in Reported Condition During the Reporting Period				
Facility Record No. * **(Select from dropdown list** - *may need to scroll up* **)**	Identification of Each Pump * (§60 5420a(b)(1))	Was the pneumatic pump constructed, modified, or reconstructed during the reporting period? * (§60.5420a(b)(8)(i))	Which condition does the pneumatic pump meet? * (§60.5420a(b)(8)(i))	If your route emissions to a control device and the control device is designed to achieve <95% emissions reduction, specify the percent emissions reduction. * (§60.5420a(b)(8)(i)(C))	Identification of Each Pump * (§60.5420a(b)(8)(ii))	Date Previously Reported* (§60 5420a(b)(8)(ii))	Which condition does the pneumatic pump meet? * (§60.5420a(b)(8)(ii))	If you now route emissions to a control device and the control device is designed to achieve <95% emissions reduction, specify the percent emissions reduction. * (§60.5420a(b)(8)(ii) and §60.5420a(b)(8)(i)(C))	Records of deviations where the pneumatic pump was not operated in compliance with requirements* (§60 5420a(b)(8)(iii) and §60.5420a(c)(16)(ii))
	e g.: Pump 12-e-2	e g.: modified	e.g.: Emissions are routed to a control device or process	e g.: 90%	e.g.: Pump 12-e-2	e g.: 10/15/17	e g.: Control device/process removed and technically infeasible to route elsewhere	e g.: 90%	e.g.: deviation of the CVS inspections
	n/a								

ATTACHMENT 2

CERTIFICATIONS OF CLOSED VENT SYSTEM DESIGN

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name ANTERO Basin: BAKKEN

Wells producing to this pad: FB 148-94-19D-18-3H, FB 148-94-30A-31-3H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vapor collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name BIERSTADT Basin: BAKKEN

Wells producing to this pad: FB 152-94-13A-24-3H, 4H, 15H, 16H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vaport collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify:
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name BROSS Basin: BAKKEN

Wells producing to this pad: FB 148-95-26B-35-3H, 4H, 5H, 8H, 9H

FB 148-95-23C-14-3H, 4H, 5H, 8H, 9H, 10H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vapor collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name DIENTE Basin: BAKKEN

Wells producing to this pad: FB 147-94-3B-10-3H, 4H, 5H, 7H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vapor collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name ANTERO Basin: BAKKEN

Wells producing to this pad: FB 148-94-19D-18-3H, FB 148-94-30A-31-3H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vapor collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify: _____
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name BIERSTADT Basin: BAKKEN

Wells producing to this pad: FB 152-94-13A-24-3H, 4H, 15H, 16H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vaport collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify:
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name BROSS Basin: BAKKEN

Wells producing to this pad: FB 148-95-26B-35-3H, 4H, 5H, 8H, 9H

FB 148-95-23C-14-3H, 4H, 5H, 8H, 9H, 10H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vapor collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify: _____
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name DIENTE Basin: BAKKEN

Wells producing to this pad: FB 147-94-3B-10-3H, 4H, 5H, 7H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vapor collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify:
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name HANDIES Basin: BAKKEN

Wells producing to this pad: FB 148-94-22A-27-2H, 11H, 12H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vaport collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify:
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name LAPLATA Basin: BAKKEN

Wells producing to this pad: FB 152-94-22D-15-2H, 10H, 11H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name OKLAHOMA Basin: BAKKEN

Wells producing to this pad: FB 147-94-1A-12-2H, 11H, 12H, FB 148-94-36D-25-2H, 10H, 11H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name PIKES/OURAY Basin: BAKKEN

Wells producing to this pad: FB 152-93-19D-18-4H, 10H, 11H, 14H

FB 152-93-19D-18-6H, 7H, 8H, 9H, 12H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vapor collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify: _____
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name PYRAMID Basin: BAKKEN

Wells producing to this pad: FB 147-94-2A-11-1H, 2H

FB 148-94-35D-26-1H, 2H, 11H, 12H, 13H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name SAN LUIS/ALAMOSITO Basin: BAKKEN

Wells producing to this pad: FB 148-95-24C-13-1H

FB 148-95-25B-36-1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vapor collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name SHERMAN Basin: BAKKEN

Wells producing to this pad: FB 147-94-17C-18-3H, 4H, 5H, 6H, 7H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name SNEFFELS Basin: BAKKEN

Wells producing to this pad:

FB 147-94-2B-11-3H, 4H, 5H, 6H, 7H, 8H, 9H

FB 148-94-35C-26-3H, 4H, 5H, 6H, 7H, 8H, 9H, 10H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[X] Other, specify: Pressure regulating blower to flare

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name STEWART/VERMEJO Basin: BAKKEN

Wells producing to this pad: FB 152-93-18B-19-1H, 2H, 3H - STEWART

FB 152-93-7C-6-12H, 13H - VERMEJO

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vapor collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[X] Other, specify: Pressure regulating blower to flare

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name SUNLIGHT Basin: BAKKEN

Wells producing to this pad: FB 152-94-13B-24-1H, 2H, 11H, 12H, 13H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify:

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name SUNSHINE Basin: BAKKEN

Wells producing to this pad: FB 148-95-23D-14-1H, 2H, 6H, 7H

FB 148-95-26A-35-1H, 2H, 10H, 14H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name TABEGUACHE Basin: BAKKEN

Wells producing to this pad: FB 148-94-27C-22-3H, 4H, 6H, 7H, 8H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name VERMEJO Basin: BAKKEN

Wells producing to this pad: FB 152-93-7C-6-5H, 6H, 7H, 8H, 9H, 10H, 11H, 14H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify:

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name WETTERHORN Basin: BAKKEN

Wells producing to this pad: FB 148-95-13A-24-3H, 4H, 5H, 6H, 7H, 8H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vaport collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify:
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name WILSON Basin: BAKKEN

Wells producing to this pad: FB 148-94-33D-28-4H, 5H, 6H, 7H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vaport collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify:
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

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BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name WINDOM Basin: BAKKEN

Wells producing to this pad: FB 148-94-36C-25-4H, 5H, 6H, 7H, 8H, 12H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name HANDIES Basin: BAKKEN

Wells producing to this pad: FB 148-94-22A-27-2H, 11H, 12H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

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BRENT DULLACK, PRODUCTION MANAGER — 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name LAPLATA Basin: BAKKEN

Wells producing to this pad: FB 152-94-22D-15-2H, 10H, 11H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name OKLAHOMA Basin: BAKKEN

Wells producing to this pad: FB 147-94-1A-12-2H, 11H, 12H, FB 148-94-36D-25-2H, 10H, 11H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

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BRENT DULLACK, PRODUCTION MANAGER — 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name PIKES/OURAY Basin: BAKKEN

Wells producing to this pad: FB 152-93-19D-18-4H, 10H, 11H, 14H

FB 152-93-19D-18-6H, 7H, 8H, 9H, 12H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vapor collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name PYRAMID Basin: BAKKEN

Wells producing to this pad: FB 147-94-2A-11-1H, 2H

FB 148-94-35D-26-1H, 2H, 11H, 12H, 13H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name SAN LUIS/ALAMOSITO Basin: BAKKEN

Wells producing to this pad: FB 148-95-24C-13-1H

FB 148-95-25B-36-1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vapor collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name SHERMAN Basin: BAKKEN

Wells producing to this pad: FB 147-94-17C-18-3H, 4H, 5H, 6H, 7H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vaport collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify:
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name: SNEFFELS Basin: BAKKEN

Wells producing to this pad:

FB 147-94-2B-11-3H, 4H, 5H, 6H, 7H, 8H, 9H

FB 148-94-35C-26-3H, 4H, 5H, 6H, 7H, 8H, 9H, 10H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[X] Other, specify: Pressure regulating blower to flare

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name STEWART/VERMEJO Basin: BAKKEN

Wells producing to this pad: FB 152-93-18B-19-1H, 2H, 3H - STEWART

FB 152-93-7C-6-12H, 13H - VERMEJO

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vapor collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[X] Other, specify: Pressure regulating blower to flare

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

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BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name SUNLIGHT Basin: BAKKEN

Wells producing to this pad: FB 152-94-13B-24-1H, 2H, 11H, 12H, 13H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

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BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name SUNSHINE Basin: BAKKEN

Wells producing to this pad: FB 148-95-23D-14-1H, 2H, 6H, 7H

FB 148-95-26A-35-1H, 2H, 10H, 14H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vaport collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify: _____
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

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BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name TABEGUACHE Basin: BAKKEN

Wells producing to this pad: FB 148-94-27C-22-3H, 4H, 6H, 7H, 8H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

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BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name VERMEJO Basin: BAKKEN

Wells producing to this pad: FB 152-93-7C-6-5H, 6H, 7H, 8H, 9H, 10H, 11H, 14H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vaport collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify: _____
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

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BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name WETTERHORN Basin: BAKKEN

Wells producing to this pad: FB 148-95-13A-24-3H, 4H, 5H, 6H, 7H, 8H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify: _____

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

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BRENT DULLACK, PRODUCTION MANAGER — 10/24/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name WILSON Basin: BAKKEN

Wells producing to this pad: FB 148-94-33D-28-4H, 5H, 6H, 7H

Affected equipment (check all that apply):

[X] Storage Vessel(s) [ ] Pneumatic Controllers [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

[X] Common vent header [X] Vaport collection line (overhead piping)

[X] Flare/combustor [ ] Vapor recovery unit (VRU)

[n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device

[ ] Other, specify:

[X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]

[X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER (Name & Title of the Qualified Engineer)

(Signature and Date) 10/24/2017

CLOSED VENT SYSTEM
DESIGN ASSESSMENT and CERTIFICATION

(Per 40 CFR 60 Subpart OOOOa, §60.5411a)

Well Pad Name WINDOM Basin: BAKKEN

Wells producing to this pad: FB 148-94-36C-25-4H, 5H, 6H, 7H, 8H, 12H

Affected equipment (check all that apply):

- [X] Storage Vessel(s)
- [ ] Pneumatic Controllers
- [ ] Pneumatic Pumps

Closed vent system design includes the following (mark all that applies):

- [X] Common vent header
- [X] Vaport collection line (overhead piping)
- [X] Flare/combustor
- [ ] Vapor recovery unit (VRU)
- [n/a] Bypass device that could divert all or a portion of the gases, vapors, or fumes from entering the control device
- [ ] Other, specify: _____
- [X] Closed vent system is designed to route all gases, vapors, and fumes emitted from the material or the affected equipment to a control device. The design was assessed and determed to have sufficient capacity and is capable to operate without detectible emissions. [60.5411a(c)]
- [X] The control device is of sufficient design and capacity to accommodate all emissions from the affected equipment. [60.5411a(d)]

Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information.

BRENT DULLACK, PRODUCTION MANAGER — 10/19/2017

(Name & Title of the Qualified Engineer) (Signature and Date)

ATTACHMENT 3

TANK BATTERIES POTENTAIL TO EMIT CALCULATION TABLES

Halcon Resources, Inc.

Antero Pad

Tanks

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

						DRE		
Using E&P Tanks Run:	**2.224** TPY VOC/BOPD	x	**1221.34** BOPD	x	98%	=	**54.32** TPY	

VOCs (Allowable):

						DRE		
Using E&P Tanks Run:	**2.224** TPY VOC/BOPD	x	**1221.34** BOPD	x	98%	=	**54.32** TPY	

HAPs (PTE):

Using E&P Tanks Run:								wt%		DRE				TPY
Benzene	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.06%	x	98%	=	**0.0082** lb/hr	=	**0.0358**
E-Benzene	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.00%	x	98%	=	**0.0006** lb/hr	=	**0.0027**
Toluene	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.12%	x	98%	=	**0.0155** lb/hr	=	**0.0678**
n-Hexane	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.84%	x	98%	=	**0.1098** lb/hr	=	**0.4807**
Xylene	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.02%	x	98%	=	**0.0032** lb/hr	=	**0.0141**
2,2,4-Trimethylpentane	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.00%	x	98%	=	**0.0000** lb/hr	=	**0.0000**
											Uncontrolled TOTAL HAPS (TPY)	=	**0.6011**

HAPs (Allowable):

Benzene	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.06%	x	98%	=	**0.0082** lb/hr	=	**0.0358**
E-Benzene	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.00%	x	98%	=	**0.0006** lb/hr	=	**0.0027**
Toluene	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.12%	x	98%	=	**0.0155** lb/hr	=	**0.0678**
n-Hexane	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.84%	x	98%	=	**0.1098** lb/hr	=	**0.4807**
Xylene	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.02%	x	98%	=	**0.0032** lb/hr	=	**0.0141**
2,2,4-Trimethylpentane	**5,339** scf/hr	x	1/379 scf/lb-mole	x	46.385 lb/lb-mol	x	0.00%	x	98%	=	**0.0000** lb/hr	=	**0.0000**
											Controlled TOTAL HAPS (TPY)	=	**0.6011**

Halcon Resources, Inc.

Bross Pad

Tanks

Oil Production	3898	BOPD	Adjusted Oil Production	3898	BOPD
Flare Gas Volume	392,223	scf/day	Adjusted Flare Gas Volume	392,223	scf/day
Lower Heating Value	2701.58903	Btu/scf	CO2 Emission Factor	377375	lb/1,000,000 scf
Molecular Weight	47.77192677	lb/lb-mole			
VOC wt Fraction	82.87%				
VOC Emission Factor	1.917	tpy/bopd			

HAPs:

Benzene wt Fraction	0.0626%
Toluene wt Fraction	0.1184%
E-Benzene wt Fraction	0.0047%
Xylene wt Fraction	0.0247%
n-Hexane wt Fraction	0.8398%
2,2,4-Trimethylpentane wt Fraction	0.0000%
HAP Emission Factor	0.002 tpy/bopd
CO2 wt Fraction	0.29%
CH4 wt Fraction	2.30%

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.917 TPY VOC/BOPD	x	3898.19 BOPD	x	98%	=	149.42	TPY

VOCs (Allowable):

					DRE		
1.917 TPY VOC/BOPD	x	3898.19 BOPD	x	98%	=	149.42	TPY

HAPs (PTE):

Using E&P Tanks Run:

																	TPY
									wt%		DRE						
Benzene	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.06%	x	98%	=	0.0258	lb/hr	=	0.1130
E-Benzene	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.00%	x	98%	=	0.0019	lb/hr	=	0.0085
Toluene	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.12%	x	98%	=	0.0488	lb/hr	=	0.2137
n-Hexane	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.84%	x	98%	=	0.3460	lb/hr	=	1.5154
Xylene	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.02%	x	98%	=	0.0102	lb/hr	=	0.0445
2,2,4-Trimethylpentane	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.00%	x	98%	=	0.0000	lb/hr	=	0.0000
											Uncontrolled TOTAL HAPS (TPY)			=	1.8950

HAPs (Allowable):

Benzene	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.06%	x	98%	=	0.0258	lb/hr	=	0.1130
E-Benzene	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.00%	x	98%	=	0.0019	lb/hr	=	0.0085
Toluene	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.12%	x	98%	=	0.0488	lb/hr	=	0.2137
n-Hexane	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.84%	x	98%	=	0.3460	lb/hr	=	1.5154
Xylene	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.02%	x	98%	=	0.0102	lb/hr	=	0.0445
2,2,4-Trimethylpentane	16,343	scf/hr	x	1/379 scf/lb-mole	x	47.77193 lb/lb-mol	x	0.00%	x	98%	=	0.0000	lb/hr	=	0.0000
										Controlled TOTAL HAPS (TPY)				=	1.8950

Halcon Resources, Inc.

Diente Pad

Tanks

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

								DRE				
Using E&P Tanks Run:	**2.224**	TPY VOC/BOPD	x	**2056.74** BOPD	x	98%	=	**91.47**	TPY			

VOCs (Allowable):

								DRE				
Using E&P Tanks Run:	**2.224**	TPY VOC/BOPD	x	**2056.74** BOPD	x	98%	=	**91.47**	TPY			

HAPs (PTE):

Using E&P Tanks Run:								wt%		DRE				TPY
Benzene	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.06%	x	98%	=	**0.0138** lb/hr	=	**0.0603**
E-Benzene	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.00%	x	98%	=	**0.0010** lb/hr	=	**0.0045**
Toluene	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.12%	x	98%	=	**0.0261** lb/hr	=	**0.1141**
n-Hexane	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.84%	x	98%	=	**0.1848** lb/hr	=	**0.8096**
Xylene	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.02%	x	98%	=	**0.0054** lb/hr	=	**0.0238**
2,2,4-Trimethylpentane	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.00%	x	98%	=	**0.0000** lb/hr	=	**0.0000**
											Uncontrolled TOTAL HAPS (TPY)		=	**1.0123**

HAPs (Allowable):

Benzene	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.06%	x	98%	=	**0.0138** lb/hr	=	**0.0603**
E-Benzene	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.00%	x	98%	=	**0.0010** lb/hr	=	**0.0045**
Toluene	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.12%	x	98%	=	**0.0261** lb/hr	=	**0.1141**
n-Hexane	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.84%	x	98%	=	**0.1848** lb/hr	=	**0.8096**
Xylene	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.02%	x	98%	=	**0.0054** lb/hr	=	**0.0238**
2,2,4-Trimethylpentane	**8,991**	scf/hr	x	1/379 scf/lb-mole	x	46.385	lb/lb-mol	x 0.00%	x	98%	=	**0.0000** lb/hr	=	**0.0000**
											Controlled TOTAL HAPS (TPY)		=	**1.0123**

Halcon Resources, Inc.

La Plata Pad

Tanks

Oil Production	**1308**	BOPD	Adjusted Oil Production	**1308**	BOPD
Flare Gas Volume	**133,472**	scf/day	Adjusted Flare Gas Volume	**133,472**	scf/day
Lower Heating Value	**2727.41**	Btu/scf	CO2 Emission Factor	**381512**	lb/1,000,000 scf
Molecular Weight	**48.28**	lb/lb-mole			
VOC wt Fraction	**83.50%**				
VOC Emission Factor	**1.978**	tpy/bopd			
HAPs:					
Benzene wt Fraction	**0.0728%**				
Toluene wt Fraction	**0.1028%**				
E-Benzene wt Fraction	**0.0161%**				
Xylene wt Fraction	**0.0328%**				
n-Hexane wt Fraction	**0.8060%**				
2,2,4-Trimethylpentane wt Fraction	**0.1032%**				
HAP Emission Factor	**0.002**	tpy/bopd			
CO2 wt Fraction	**0.34%**				
CH4 wt Fraction	**2.43%**				

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.978 TPY VOC/BOPD	x	**1308.1** BOPD	x	98%	=	**51.76** TPY	

VOCs (Allowable):

					DRE		
1.978 TPY VOC/BOPD	x	**1308.10** BOPD	x	98%	=	**51.76** TPY	

HAPs (PTE):

Using E&P Tanks Run:								wt%		DRE				TPY
Benzene	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.07%	x	98%	=	**0.0103** lb/hr	=	**0.0452**
E-Benzene	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.02%	x	98%	=	**0.0023** lb/hr	=	**0.0100**
Toluene	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.10%	x	98%	=	**0.0146** lb/hr	=	**0.0638**
n-Hexane	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.81%	x	98%	=	**0.1142** lb/hr	=	**0.5002**
Xylene	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.03%	x	98%	=	**0.0046** lb/hr	=	**0.0203**
2,2,4-Trimethylpentane	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.10%	x	98%	=	**0.0146** lb/hr	=	**0.0641**
										Uncontrolled TOTAL HAPS (TPY)		=	**0.7036**

HAPs (Allowable):

Benzene	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.07%	x	98%	=	**0.0103** lb/hr	=	**0.0452**
E-Benzene	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.02%	x	98%	=	**0.0023** lb/hr	=	**0.0100**
Toluene	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.10%	x	98%	=	**0.0146** lb/hr	=	**0.0638**
n-Hexane	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.81%	x	98%	=	**0.1142** lb/hr	=	**0.5002**
Xylene	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.03%	x	98%	=	**0.0046** lb/hr	=	**0.0203**
2,2,4-Trimethylpentane	**5,561** scf/hr	x	1/379 scf/lb-mole	x	48.28045 lb/lb-mol	x	0.10%	x	98%	=	**0.0146** lb/hr	=	**0.0641**
										Controlled TOTAL HAPS (TPY)		=	**0.7036**

Halcon Resources, Inc.

Pikes-Ouray Pad

Tanks

Oil Production	4634	BOPD	Adjusted Oil Production	4634	BOPD
Flare Gas Volume	473,807	scf/day	Adjusted Flare Gas Volume	473,807	scf/day
Lower Heating Value	2730.514455	Btu/scf	CO2 Emission Factor	381997	lb/1,000,000 scf
Molecular Weight	48.33775343	lb/lb-mole			
VOC wt Fraction	83.61%				
VOC Emission Factor	1.988	tpy/bopd			
HAPs:					
Benzene wt Fraction	0.0728%				
Toluene wt Fraction	0.1028%				
E-Benzene wt Fraction	0.0161%				
Xylene wt Fraction	0.0328%				
n-Hexane wt Fraction	0.8060%				
2,2,4-Trimethylpentane wt Fraction	0.1032%				
HAP Emission Factor	0.002	tpy/bopd			
CO2 wt Fraction	0.34%				
CH4 wt Fraction	2.43%				

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.988	TPY VOC/BOPD	x	4633.94 BOPD	x	98%	=	184.21 TPY

VOCs (Allowable):

					DRE		
1.988	TPY VOC/BOPD	x	4633.94 BOPD	x	98%	=	184.21 TPY

HAPs (PTE):

Using E&P Tanks Run:

									wt%		DRE				TPY
Benzene	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.07%	x	98%	=	0.0367 lb/hr	=	0.1605
E-Benzene	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.02%	x	98%	=	0.0081 lb/hr	=	0.0356
Toluene	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.10%	x	98%	=	0.0518 lb/hr	=	0.2268
n-Hexane	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.81%	x	98%	=	0.4059 lb/hr	=	1.7777
Xylene	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.03%	x	98%	=	0.0165 lb/hr	=	0.0723
2,2,4-Trimethylpentane	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.10%	x	98%	=	0.0520 lb/hr	=	0.2277
											Uncontrolled TOTAL HAPS (TPY)	=	2.5005

HAPs (Allowable):

Benzene	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.07%	x	98%	=	0.0367 lb/hr	=	0.1605
E-Benzene	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.02%	x	98%	=	0.0081 lb/hr	=	0.0356
Toluene	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.10%	x	98%	=	0.0518 lb/hr	=	0.2268
n-Hexane	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.81%	x	98%	=	0.4059 lb/hr	=	1.7777
Xylene	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.03%	x	98%	=	0.0165 lb/hr	=	0.0723
2,2,4-Trimethylpentane	19,742 scf/hr	x	1/379 scf/lb-mole	x	48.33775 lb/lb-mol	x	0.10%	x	98%	=	0.0520 lb/hr	=	0.2277
											Controlled TOTAL HAPS (TPY)	=	2.5005

Halcon Resources, Inc.

Alamosito-San Luis Pad

Tanks

Oil Production	4819	BOPD	Adjusted Oil Production	4819	BOPD
Flare Gas Volume	489,840	scf/day	Adjusted Flare Gas Volume	489,840	scf/day
Lower Heating Value	2706.154478	Btu/scf	CO2 Emission Factor	378047	lb/1,000,000 scf
Molecular Weight	47.84681735	lb/lb-mole			
VOC wt Fraction	83.06%				
VOC Emission Factor	1.944	tpy/bopd			
HAPs:					
Benzene wt Fraction	0.0626%				
Toluene wt Fraction	0.1184%				
E-Benzene wt Fraction	0.0047%				
Xylene wt Fraction	0.0247%				
n-Hexane wt Fraction	0.8398%				
2,2,4-Trimethylpentane wt Fraction	0.0000%				
HAP Emission Factor	0.002	tpy/bopd			
CO2 wt Fraction	0.27%				
CH4 wt Fraction	2.25%				

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.944	TPY VOC/BOPD	x	4819.07 BOPD	x	98%	=	187.32 TPY

VOCs (Allowable):

					DRE		
1.944	TPY VOC/BOPD	x	4819.07 BOPD	x	98%	=	187.32 TPY

HAPs (PTE):

Using E&P Tanks Run:

									wt%		DRE				TPY
Benzene	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.06%	x	98%	=	0.0323 lb/hr	=	0.1413
E-Benzene	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.00%	x	98%	=	0.0024 lb/hr	=	0.0106
Toluene	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.12%	x	98%	=	0.0610 lb/hr	=	0.2672
n-Hexane	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.84%	x	98%	=	0.4328 lb/hr	=	1.8956
Xylene	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.02%	x	98%	=	0.0127 lb/hr	=	0.0556
2,2,4-Trimethylpentane	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
											Uncontrolled TOTAL HAPS (TPY)	=	2.3703

HAPs (Allowable):

Benzene	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.06%	x	98%	=	0.0323 lb/hr	=	0.1413
E-Benzene	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.00%	x	98%	=	0.0024 lb/hr	=	0.0106
Toluene	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.12%	x	98%	=	0.0610 lb/hr	=	0.2672
n-Hexane	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.84%	x	98%	=	0.4328 lb/hr	=	1.8956
Xylene	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.02%	x	98%	=	0.0127 lb/hr	=	0.0556
2,2,4-Trimethylpentane	20,410 scf/hr	x	1/379 scf/lb-mole	x	47.84682 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
											Controlled TOTAL HAPS (TPY)	=	2.3703

Halcon Resources, Inc.

Sherman Pad

Tanks

Oil Production	**2127**	BOPD	Adjusted Oil Production	**2127**	BOPD
Flare Gas Volume	**216,310**	scf/day	Adjusted Flare Gas Volume	**216,310**	scf/day
Lower Heating Value	**2706.460777**	Btu/scf	CO2 Emission Factor	**378092**	lb/1,000,000 scf
Molecular Weight	**47.85184182**	lb/lb-mole			
VOC wt Fraction	**83.07%**				
VOC Emission Factor	**1.945**	tpy/bopd			
HAPs:					
Benzene wt Fraction	**0.0626%**				
Toluene wt Fraction	**0.1184%**				
E-Benzene wt Fraction	**0.0047%**				
Xylene wt Fraction	**0.0247%**				
n-Hexane wt Fraction	**0.8398%**				
2,2,4-Trimethylpentane wt Fraction	**0.0000%**				
HAP Emission Factor	**0.002**	tpy/bopd			
CO2 wt Fraction	**0.27%**				
CH4 wt Fraction	**2.24%**				

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.945	TPY VOC/BOPD	x	**2126.62** BOPD	x	98%	=	**82.74** TPY

VOCs (Allowable):

					DRE		
1.945	TPY VOC/BOPD	x	**2126.62** BOPD	x	98%	=	**82.74** TPY

HAPs (PTE):

Using E&P Tanks Run:									wt%		DRE				TPY
Benzene	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.06%	x	98%	=	**0.0142** lb/hr	=	**0.0624**
E-Benzene	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.00%	x	98%	=	**0.0011** lb/hr	=	**0.0047**
Toluene	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.12%	x	98%	=	**0.0269** lb/hr	=	**0.1180**
n-Hexane	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.84%	x	98%	=	**0.1911** lb/hr	=	**0.8372**
Xylene	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.02%	x	98%	=	**0.0056** lb/hr	=	**0.0246**
2,2,4-Trimethylpentane	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.00%	x	98%	=	**0.0000** lb/hr	=	**0.0000**
											Uncontrolled TOTAL HAPS (TPY)	=	**1.0468**

HAPs (Allowable):

Benzene	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.06%	x	98%	=	**0.0142** lb/hr	=	**0.0624**
E-Benzene	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.00%	x	98%	=	**0.0011** lb/hr	=	**0.0047**
Toluene	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.12%	x	98%	=	**0.0269** lb/hr	=	**0.1180**
n-Hexane	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.84%	x	98%	=	**0.1911** lb/hr	=	**0.8372**
Xylene	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.02%	x	98%	=	**0.0056** lb/hr	=	**0.0246**
2,2,4-Trimethylpentane	**9,013** scf/hr	x	1/379 scf/lb-mole	x	47.85184 lb/lb-mol	x	0.00%	x	98%	=	**0.0000** lb/hr	=	**0.0000**
											Controlled TOTAL HAPS (TPY)	=	**1.0468**

Bruin E&P Operating, LLC

Sneffels Pad

Tanks

VRU Process

Oil Production	**3756**	BOPD	Annual Operating Hours	**2500**	Hours
Flare Gas Volume	**378,284**	scf/day	VRU Efficiency	**90%**	
Lower Heating Value	**2701.97**	Btu/scf	Adjusted Oil Production	**2792**	BOPD
Molecular Weight	**47.78**	lb/lb-mole	Adjusted Flare Gas Volume	**281,122**	scf/day
VOC wt Fraction	**82.89%**		CO2 Emission Factor	**377431**	lb/1,000,000 scf
VOC Emission Factor	**1.919**	tpy/bopd			

HAPs:

Benzene wt Fraction	**0.0626%**
Toluene wt Fraction	**0.1184%**
E-Benzene wt Fraction	**0.0047%**
Xylene wt Fraction	**0.0247%**
n-Hexane wt Fraction	**0.8398%**
2,2,4-Trimethylpentane wt Fraction	**0.0000%**
HAP Emission Factor	**0.002** tpy/bopd
CO2 wt Fraction	**0.29%**
CH4 wt Fraction	**2.29%**

[a]The VRU was assumed to operate for only 2,000 hours per year due to operational challenges associated the equipment. To be conservative the VRU's efficiency was assumed to be only 95%.

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.919 TPY VOC/BOPD	x	**2792** BOPD	x	98%	=	**107.13** TPY

VOCs (Allowable):

					DRE		
1.919 TPY VOC/BOPD	x	**2792** BOPD	x	98%	=	**107.13** TPY

HAPs (PTE):

Using E&P Tanks Run:

								wt%		DRE				TPY
Benzene	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.06%	x	98%	=	**0.0185** lb/hr	=	**0.0810**
E-Benzene	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.00%	x	98%	=	**0.0014** lb/hr	=	**0.0061**
Toluene	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.12%	x	98%	=	**0.0350** lb/hr	=	**0.1532**
n-Hexane	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.84%	x	98%	=	**0.2480** lb/hr	=	**1.0863**
Xylene	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.02%	x	98%	=	**0.0073** lb/hr	=	**0.0319**
2,2,4-Trimethylpentane	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.00%	x	98%	=	**0.0000** lb/hr	=	**0.0000**
											Uncontrolled TOTAL HAPS (TPY)	=	**1.3584**

HAPs (Allowable):

Benzene	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.06%	x	98%	=	**0.0185** lb/hr	=	**0.0810**
E-Benzene	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.00%	x	98%	=	**0.0014** lb/hr	=	**0.0061**
Toluene	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.12%	x	98%	=	**0.0350** lb/hr	=	**0.1532**
n-Hexane	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.84%	x	98%	=	**0.2480** lb/hr	=	**1.0863**
Xylene	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.02%	x	98%	=	**0.0073** lb/hr	=	**0.0319**
2,2,4-Trimethylpentane	**11,713** scf/hr	x	1/379 scf/lb-mole	x	47.7782 lb/lb-mol	x	0.00%	x	98%	=	**0.0000** lb/hr	=	**0.0000**
											Controlled TOTAL HAPS (TPY)	=	**1.3584**

Halcon Resources, Inc.

Stewart-Vermejo Pad

Tanks

Oil Production	**5086**	BOPD	Adjusted Oil Production	**5086**	BOPD
Flare Gas Volume	**350,614**	scf/day	Adjusted Flare Gas Volume	**350,614**	scf/day
Lower Heating Value	**2465.3939**	Btu/scf	CO2 Emission Factor	**381416**	lb/1,000,000 scf
Molecular Weight	**47.46854242**	lb/lb-mole			
VOC wt Fraction	**83.54%**				
VOC Emission Factor	**1.320**	tpy/bopd			
HAPs:					
Benzene wt Fraction	**0.0728%**				
Toluene wt Fraction	**0.1028%**				
E-Benzene wt Fraction	**0.0161%**				
Xylene wt Fraction	**0.0328%**				
n-Hexane wt Fraction	**0.8060%**				
2,2,4-Trimethylpentane wt Fraction	**0.1032%**				
HAP Emission Factor	**0.002**	tpy/bopd			
CO2 wt Fraction	**0.01%**				
CH4 wt Fraction	**2.56%**				

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.320 TPY VOC/BOPD	x	**5086.07** BOPD	x	98%	=	**134.27** TPY	

VOCs (Allowable):

					DRE		
1.320 TPY VOC/BOPD	x	**5086.07** BOPD	x	98%	=	**134.27** TPY	

HAPs (PTE):

Using E&P Tanks Run:																TPY
Benzene	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.07%	x	98%	=	**0.0266** lb/hr	=	**0.1167**
E-Benzene	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.02%	x	98%	=	**0.0059** lb/hr	=	**0.0258**
Toluene	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.10%	x	98%	=	**0.0376** lb/hr	=	**0.1648**
n-Hexane	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.81%	x	98%	=	**0.2949** lb/hr	=	**1.2918**
Xylene	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.03%	x	98%	=	**0.0120** lb/hr	=	**0.0525**
2,2,4-Trimethylpentane	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.10%	x	98%	=	**0.0378** lb/hr	=	**0.1654**
										Uncontrolled TOTAL HAPS (TPY)		=	**1.8171**

HAPs (Allowable):

Benzene	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.07%	x	98%	=	**0.0266** lb/hr	=	**0.1167**
E-Benzene	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.02%	x	98%	=	**0.0059** lb/hr	=	**0.0258**
Toluene	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.10%	x	98%	=	**0.0376** lb/hr	=	**0.1648**
n-Hexane	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.81%	x	98%	=	**0.2949** lb/hr	=	**1.2918**
Xylene	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.03%	x	98%	=	**0.0120** lb/hr	=	**0.0525**
2,2,4-Trimethylpentane	**14,609** scf/hr	x	1/379 scf/lb-mole	x	47.46854 lb/lb-mol	x	0.10%	x	98%	=	**0.0378** lb/hr	=	**0.1654**
										Controlled TOTAL HAPS (TPY)		=	**1.8171**

Halcon Resources, Inc.

Sunshine Pad

Tanks

Oil Production	3589	BOPD	Adjusted Oil Production	3589	BOPD
Flare Gas Volume	368,222	scf/day	Adjusted Flare Gas Volume	368,222	scf/day
Lower Heating Value	2710.427615	Btu/scf	CO2 Emission Factor	382816	lb/1,000,000 scf
Molecular Weight	47.91691294	lb/lb-mole			
VOC wt Fraction	84.29%				
VOC Emission Factor	1.969	tpy/bopd			
HAPs:					
Benzene wt Fraction	0.0626%				
Toluene wt Fraction	0.1184%				
E-Benzene wt Fraction	0.0047%				
Xylene wt Fraction	0.0247%				
n-Hexane wt Fraction	0.8398%				
2,2,4-Trimethylpentane wt Fraction	0.0000%				
HAP Emission Factor	0.024	tpy/bopd			
CO2 wt Fraction	0.25%				
CH4 wt Fraction	2.20%				

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.969	TPY VOC/BOPD	x	3588.56 BOPD	x	98%	=	141.31 TPY

VOCs (Allowable):

					DRE		
1.969	TPY VOC/BOPD	x	3588.56 BOPD	x	98%	=	141.31 TPY

HAPs (PTE):

Using E&P Tanks Run:									wt%		DRE				TPY
Benzene	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.06%	x	98%	=	0.0243 lb/hr	=	0.1064
E-Benzene	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.00%	x	98%	=	0.0018 lb/hr	=	0.0080
Toluene	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.12%	x	98%	=	0.0459 lb/hr	=	0.2012
n-Hexane	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.84%	x	98%	=	0.3258 lb/hr	=	1.4270
Xylene	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.02%	x	98%	=	0.0096 lb/hr	=	0.0419
2,2,4-Trimethylpentane	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
											Uncontrolled TOTAL HAPS (TPY)	=	1.7844

HAPs (Allowable):

Benzene	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.06%	x	98%	=	0.0243 lb/hr	=	0.1064
E-Benzene	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.00%	x	98%	=	0.0018 lb/hr	=	0.0080
Toluene	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.12%	x	98%	=	0.0459 lb/hr	=	0.2012
n-Hexane	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.84%	x	98%	=	0.3258 lb/hr	=	1.4270
Xylene	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.02%	x	98%	=	0.0096 lb/hr	=	0.0419
2,2,4-Trimethylpentane	15,343 scf/hr	x	1/379 scf/lb-mole	x	47.91691 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
											Controlled TOTAL HAPS (TPY)	=	1.7844

Halcon Resources, Inc.

Tabeguache Pad

Tanks

Oil Production	2635	BOPD	Adjusted Oil Production	2635	BOPD
Flare Gas Volume	265,600	scf/day	Adjusted Flare Gas Volume	265,600	scf/day
Lower Heating Value	2702.384826	Btu/scf	CO2 Emission Factor	381621	lb/1,000,000 scf
Molecular Weight	47.78498084	lb/lb-mole			
VOC wt Fraction	83.96%				
VOC Emission Factor	1.921	tpy/bopd			
HAPs:					
Benzene wt Fraction	0.0626%				
Toluene wt Fraction	0.1184%				
E-Benzene wt Fraction	0.0047%				
Xylene wt Fraction	0.0247%				
n-Hexane wt Fraction	0.8398%				
2,2,4-Trimethylpentane wt Fraction	0.0000%				
HAP Emission Factor	0.002	tpy/bopd			
CO2 wt Fraction	0.29%				
CH4 wt Fraction	2.29%				

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.921	TPY VOC/BOPD	x	2635.02 BOPD	x	98%	=	101.25 TPY

VOCs (Allowable):

					DRE		
1.921	TPY VOC/BOPD	x	2635.02 BOPD	x	98%	=	101.25 TPY

HAPs (PTE):

Using E&P Tanks Run:

									wt%		DRE				TPY
Benzene	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.06%	x	98%	=	0.0175 lb/hr	=	0.0765
E-Benzene	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.00%	x	98%	=	0.0013 lb/hr	=	0.0057
Toluene	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.12%	x	98%	=	0.0330 lb/hr	=	0.1447
n-Hexane	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.84%	x	98%	=	0.2344 lb/hr	=	1.0265
Xylene	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.02%	x	98%	=	0.0069 lb/hr	=	0.0301
2,2,4-Trimethylpentane	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
											Uncontrolled TOTAL HAPS (TPY)	=	1.2836

HAPs (Allowable):

Benzene	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.06%	x	98%	=	0.0175 lb/hr	=	0.0765
E-Benzene	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.00%	x	98%	=	0.0013 lb/hr	=	0.0057
Toluene	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.12%	x	98%	=	0.0330 lb/hr	=	0.1447
n-Hexane	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.84%	x	98%	=	0.2344 lb/hr	=	1.0265
Xylene	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.02%	x	98%	=	0.0069 lb/hr	=	0.0301
2,2,4-Trimethylpentane	11,067 scf/hr	x	1/379 scf/lb-mole	x	47.78498 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
											Controlled TOTAL HAPS (TPY)	=	1.2836

Halcon Resources, Inc.

Wilson Pad

Tanks

Oil Production	1296	BOPD	Adjusted Oil Production	1296	BOPD
Flare Gas Volume	133,042	scf/day	Adjusted Flare Gas Volume	133,042	scf/day
Lower Heating Value	2710.602306	Btu/scf	CO2 Emission Factor	378702	lb/1,000,000 scf
Molecular Weight	47.91977853	lb/lb-mole			
VOC wt Fraction	83.24%				
VOC Emission Factor	1.970	tpy/bopd			
HAPs:					
Benzene wt Fraction	0.0626%				
Toluene wt Fraction	0.1184%				
E-Benzene wt Fraction	0.0047%				
Xylene wt Fraction	0.0247%				
n-Hexane wt Fraction	0.8398%				
2,2,4-Trimethylpentane wt Fraction	0.0000%				
HAP Emission Factor	0.002	tpy/bopd			
CO2 wt Fraction	0.25%				
CH4 wt Fraction	2.20%				

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.970	TPY VOC/BOPD	x	1296.09 BOPD	x	98%	=	51.06 TPY

VOCs (Allowable):

					DRE		
1.970	TPY VOC/BOPD	x	1296.09 BOPD	x	98%	=	51.06 TPY

HAPs (PTE):

Using E&P Tanks Run:

									wt%		DRE				TPY
Benzene	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.06%	x	98%	=	0.0088 lb/hr	=	0.0384
E-Benzene	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.00%	x	98%	=	0.0007 lb/hr	=	0.0029
Toluene	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.12%	x	98%	=	0.0166 lb/hr	=	0.0727
n-Hexane	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.84%	x	98%	=	0.1177 lb/hr	=	0.5156
Xylene	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.02%	x	98%	=	0.0035 lb/hr	=	0.0151
2,2,4-Trimethylpentane	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
												Uncontrolled TOTAL HAPS (TPY)	=	0.6448

HAPs (Allowable):

Benzene	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.06%	x	98%	=	0.0088 lb/hr	=	0.0384
E-Benzene	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.00%	x	98%	=	0.0007 lb/hr	=	0.0029
Toluene	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.12%	x	98%	=	0.0166 lb/hr	=	0.0727
n-Hexane	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.84%	x	98%	=	0.1177 lb/hr	=	0.5156
Xylene	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.02%	x	98%	=	0.0035 lb/hr	=	0.0151
2,2,4-Trimethylpentane	5,543	scf/hr	x	1/379 scf/lb-mole	x	47.91978 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
												Controlled TOTAL HAPS (TPY)	=	0.6448

HRC Operating, LLC

Windom Pad

Tanks

Oil Production	2979	BOPD	Adjusted Oil Production	2979	BOPD
Flare Gas Volume	301,761	scf/day	Adjusted Flare Gas Volume	301,761	scf/day
Lower Heating Value	2704.66	Btu/scf	CO2 Emission Factor	377827	lb/1,000,000 scf
Molecular Weight	47.82	lb/lb-mole			
VOC wt Fraction	83.00%				
VOC Emission Factor	1.935	tpy/bopd			

HAPs:	
Benzene wt Fraction	0.0626%
Toluene wt Fraction	0.1184%
E-Benzene wt Fraction	0.0047%
Xylene wt Fraction	0.0247%
n-Hexane wt Fraction	0.8398%
2,2,4-Trimethylpentane wt Fraction	0.0000%
HAP Emission Factor	0.002 tpy/bopd
CO2 wt Fraction	0.28%
CH4 wt Fraction	2.26%

CRITERIA POLLUTANT EMISSIONS[a]

VOCs (PTE):

					DRE		
1.935 TPY VOC/BOPD	x	2978.63 BOPD	x	98%	=	115.26 TPY	

VOCs (Allowable):

					DRE		
1.935 TPY VOC/BOPD	x	2978.63 BOPD	x	98%	=	115.26 TPY	

HAPs (PTE):

Using E&P Tanks Run:								wt%		DRE				TPY
Benzene	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.06%	x	98%	=	0.0199 lb/hr	=	0.0870
E-Benzene	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.00%	x	98%	=	0.0015 lb/hr	=	0.0065
Toluene	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.12%	x	98%	=	0.0376 lb/hr	=	0.1646
n-Hexane	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.84%	x	98%	=	0.2665 lb/hr	=	1.1671
Xylene	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.02%	x	98%	=	0.0078 lb/hr	=	0.0343
2,2,4-Trimethylpentane	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
										Uncontrolled TOTAL HAPS (TPY)		=	1.4595

HAPs (Allowable):

Benzene	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.06%	x	98%	=	0.0199 lb/hr	=	0.0870
E-Benzene	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.00%	x	98%	=	0.0015 lb/hr	=	0.0065
Toluene	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.12%	x	98%	=	0.0376 lb/hr	=	0.1646
n-Hexane	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.84%	x	98%	=	0.2665 lb/hr	=	1.1671
Xylene	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.02%	x	98%	=	0.0078 lb/hr	=	0.0343
2,2,4-Trimethylpentane	12,573 scf/hr	x	1/379 scf/lb-mole	x	47.82228 lb/lb-mol	x	0.00%	x	98%	=	0.0000 lb/hr	=	0.0000
										Controlled TOTAL HAPS (TPY)		=	1.4595